

Remarks:

Claims 1-2, 4-8, and 12-17 remain for consideration in this application with claims 1 and 12 being in independent format. Claims 9-11 were canceled in view of the restriction requirement that was contained in the Office Action Of June 18, 2004 and claim 3 has been canceled herein and the limitations therefrom added into claim 1. Claims 12-17 are newly-added.

Claims 1-8 were rejected under 35 USC 112, second paragraph, for indefiniteness of the phrases and terms "capable of attracting" and "location." These have been removed from the present claims. Additionally, applicants have amended "No." and "Nos." to both "NO:" and "NOS:" and therefore, applicants assert that these rejections have been overcome.

Claims 1, 2, and 5-7 were rejected under 35 USC 103 as unpatentable over Yoshimura (US Patent No. 6,090,795); claims 1, and 4-8 were rejected under 35 USC 103 as unpatentable over Geczy (US Patent No. 5,731,166); claims 1, 2, and 4-8 were rejected under 35 USC 103 as unpatentable over Carney (US Patent No. 6,184,342); and claim 1 was rejected under 35 USC 103 as unpatentable over Auron (US Patent No. 5,681,933). To begin, applicants have amended independent claim 1 by inserting the limitations of previous claim 3 therein, with claim 3 being canceled in this amendment. Applicants note that none of the rejections over the prior art included claim 3, and therefore, applicants assert that these rejections have been overcome.

Applicants assert that new claims 12-17 are also patentable over the prior art. Independent claim 12 recites:

A method of attracting a leukocyte to a wound location or area of inflammation within an organism through chemotaxis comprising the steps of:

administering a peptide to the organism, said peptide having from 15 to 39 amino acids and having therein at least 15 contiguous amino acids from SEQ ID NO: 1; and
causing said leukocyte to migrate to said location or area.

Support for this claim is found in the present specification as well as in the specification of the “parent” application, which is now US Patent No. 5,830,993. This parent application was specifically incorporated by reference in the present application at page 1, lines 6-8. Specifically, the present application provides support for the phrases “A method of attracting a leukocyte to a wound location or area of inflammation within an organism through chemotaxis” and “causing said leukocyte to migrate to said location or area” at page 3, line 26 to page 4, line 2, which recites:

The present invention is predicated upon the discovery that specific peptides (e.g., PR-39) are capable of 1) inhibiting O_2^- synthesis by leukocyte enzymes (e.g., NADPH oxidase), and 2) attracting leukocytes (e.g., neutrophils). These peptides can be used as novel medicaments that fight infection by attracting leukocytes to a wound site, yet restrict tissue damage at the wound site caused by excessive oxygen radicals produced by these leukocytes. Preferably, these peptides have a sequence included in PR-39 (e.g., Sequence ID Nos. 1 and 2 for peptides capable of inhibiting O_2^- production, and Sequences ID Nos. 1, 2, 5, 6, and 7 for peptides capable of attracting leukocytes).

Additionally, page 14, lines 5-12 and Fig. 9, provide further support. For example, page 14 recites:

Influence of PR-39 on neutrophil chemotaxis. Phagocytic cells migrate from the blood to areas of inflammation in response to chemotactic agents. Fig. 9 shows that PR-14, PR-15, PR-16, PR-26, and PR-39 are chemotactic agents for neutrophils (PR-14, PR-15, PR-16, and PR-26 are used at 1 μ M, and PR-39 was used at 0.05 μ M; the chemoattractant C5a, a positive control, was used at 1 x 10⁻⁸M; starred entries are different from the control, P < 0.05). Fig. 10 shows a dose response of PR-39 for neutrophil chemotaxis. The ability of

PR-39 to function as a chemotactic agent increases the probability that sufficient phagocytic cells are present at an inflammatory site to limit an infection.

Example 1 describes and provides support for the phrase “administering a peptide to the organism.”

US Patent No. 5,830,993, which was incorporated by reference by the present application and is related to the present application in that the present application is a divisional application of a continuation-in-part application to the application from which US Patent No. 5,830,993 issued, provides support for the limitation of “said peptide having from 15 to 39 amino acids and having therein at least 15 contiguous amino acids from SEQ ID NO: 1.” Column 2, lines 4-8, recites:

In preferred forms, the invention relates to isolated anti-microbial peptides comprising a peptide compound having a partial amino acid sequence of PR-39 (SEQ ID NO: 1) with at least 15 and less than all of the amino acid residues of PR-39, beginning at the -NH₂ terminal thereof.

This patent also disclosed the sequences of SEQ ID NOS: 1, 2, 5, 6, and 7, all of which are partial amino acid sequences of PR-39 as shown by Fig. 1 of that patent and Fig. 1 of the present application. Moreover, the present specification provides five examples of peptides (SEQ ID NOS: 1, 2, 5, 6, and 7, which are identical to the same sequences listed above as having been disclosed in the incorporated patent) that have from 15 to 39 amino acids, at least 15 contiguous amino acids from SEQ ID NO: 1, administering these peptides to an organism, and causing a leukocyte to migrate to a wound location or area of inflammation through chemotaxis. Applicants assert that all of the cited references fail to disclose or suggest the claimed method using the recited peptide.

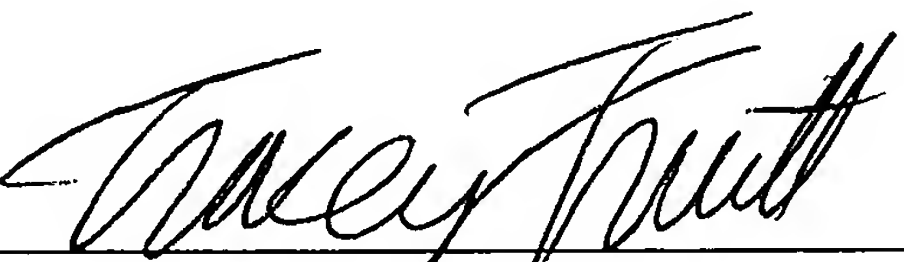
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Accordingly, applicants believe that a Notice of Allowance is in order and is, therefore, courteously solicited.

Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,

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